

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

KRAIG A. KIRSCHNER

Serial No.: 10/668,116

Filed: September 22, 2003

For: RISSE ASSEMBLY

Group Art Unit: 3632

Examiner: Tran Le

Mail Stop Appeal  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REPLY BRIEF**

Sir:

**I. Preliminary Statement**

The rules of engagement set forth in 37 CFR 41.37(c)(vii) dictate that issues not raised in an Appeal Brief are not to be considered. The Appeal Brief in this matter only addresses claim 8 and, regarding claim 8, does not raise issues pertaining to the "radiused inside edges" or the CPVC material. The issues discussed in the Examiner's Answer regarding claims 11-12 and 14, the edges and the material are distractions, inappropriately raised in answer and not addressed here.

Refocusing on the issues at hand, the invention as recited in claim 8 provides a clamp holding a frangible pipe as a vertical riser with radially uniform

and controlled compression. The assembled clamp has a uniform cylindrical clamping surface with a controlled diameter smaller than the standard pipe to effect this result. The clamping surface is realized through a limitation on the ability to tighten the clamp beyond a fixed amount, the presentation of a cylindrical surface to effect compression fully about the pipe and a preselected maximum compressive fit effected through the diametrical relationship of the cylindrical surface to the pipe.

The Appeal Brief looks to the failure of the applied references, taken either independently or in combination, to provide either the radially uniform and controlled compression or any combination of the recited attributes achieving this result. The Examiner's Answer has not overcome these failings.

## **II. Characterization of the Applied Prior Art in the Examiner's Answer**

The Examiner's Answer characterizes **Brown** as having a "substantially" hemicylindrical section: "each bar including a substantially hemicylindrical section (21a)" (Examiner's Answer p. 3). The Appeal Brief establishes that **Brown** does not teach a hemicylindrical section. Rather, a loose fitting pipe clamp is shown, As fully explained in the Appeal Brief (pp. 4-5), pipe clamps are composed of *semicylindrical* sections with each forming less than a *hemicylindrical* section. That this is the case is not contested in the Examiner's Answer; and the characterization of the section in **Brown** in both the Final Rejection and the Examiner's Answer remains "substantially hemicylindrical."

The Examiner's Answer characterizes **Rahe** as teaching a known technique, asserting that **Rahe**:

teaches the clamp members designed with respect to the outer diameter of the tube 46 being the ranges of less than or equal to

about 3.5 percent of the outer diameter and greater than or equal to about 0.5 percent of such diameter....

(Examiner's Answer p. 3)

The reference to the diameter of the tube is accurate but there is no reference to what on the clamp is proportioned to that diameter. The characterization of **Rahe** in the Examiner's Answer is incomplete and insufficient to support the rejection. In fact, the range of fit on the clamp is created by "the absence of a thin slice [of the clamp member] at the pair of flat faces 90 of the clamp member." Rahe col. 8, ll. 16-17.

### III. Application of the Prior Art as Characterized in the Examiner's Answer

A review of the guide to 35 U.S.C. 103 patent examination suggests that the current rejection is appropriately characterized under "(D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results" in MPEP §2143. This category of rejection requires an articulation, inter alia, of:

- (1) a finding that the prior art contained a "base" device (method, or product) upon which the claimed invention can be seen as an "improvement;"
- (2) a finding that the prior art contained a known technique that is applicable to the base device (method, or product)
- (3) a finding that one of ordinary skill in the art would have recognized that applying the known technique would have yielded predictable results and resulted in an improved system;

The **Brown** reference does not have a "'base' device" relevant to the present invention as articulated in the claims. **Brown** does not have a "*hemicylindrical section*" as recited in claim 8. It has what is known to one of ordinary skill in the art as a pipe clamp. The characterization of **Brown** in the

Examiner's Answer asserting "substantially hemicylindrical" is insufficient to support the rejection. As the difference in structure and compressive function in the present invention depends upon the sections being fully hemicylindrical (see Appeal Brief p. 4), a difference in kind and not degree exists between **Brown** and the device of claim 8. Thus, the very feature specifically recited in the claims which enables uniform compression is glossed over through the application of a similar looking mechanism in the Examiner's Answer; one that manifestly diverges from the present invention, its operation and result.

The **Rahe** reference is asserted in the Final Rejection and in the Examiner's Answer to practice a teaching of compression to amend the **Brown** device. However, the **Rahe** reference imparts compression in gripping a tool in one direction through the tightening of two coupling segments with less than a hemicylindrical section by the missing slice:

The split clamp includes a pair of clamp members, each of such members being shaped to fit about part of the periphery of the elongated members and each having a pair of faces to oppose the corresponding faces of the other clamp member. Such clamp members are formed, with respect to the elongated members, to an opposed face separation, of less than or equal to about 3.4 percent of the diameter for the elongated members.

Rahe col. 3, ll. 52-60.

Referring first to the right clamp member 86 as shown in FIG. 6A-6C, that clamp member is formed to essentially a full, half-clamp and full, half-right internal cylindrical surfaces (apart from the slight chamfering as shown) except for the absence of a thin slice at the pair of flat faces 90 of the clamp member. These, of course, are the faces which are adapted to oppose corresponding faces of the left clamp member. The absence of this thin slice is represented by the two dashed-dotted lines 92 and the arrows 94.

Rahe col. 8, ll. 12-21.

(See the Figure at Appeal Brief p.6.)

This technique of gripping through compression in one direction does not satisfy the technique used to provide uniform compression about the gripped pipe as recited in claim 8: *“the hemicylindrical sections of the two bars defining an inside diameter smaller than the specified outside diameter by not to exceed five percent with the first straight sections juxtaposed with the second straight sections, respectively.”* **Rahe** does not exhibit a circle, or even a continuous curve, from which a “diameter” can be defined when the faces of the coupling elements are juxtaposed. Therefore, **Rahe** fails to provide a known technique that “resulted in an improved system” having any relationship to the present invention where a smaller uniform diameter provides uniform clamping about the pipe. The technique of **Rahe** does not use diametrical fit and does not employ hemicylindrical sections as recited in claim 8. As such, there is no similar uniform clamping about the pipe and the known technique applied in the Examiner’s Answer is not the technique used in the invention as defined in claim 8.

The combination of **Brown** and **Rahe** starts with a “substantially” similar looking but operationally and physically divergent “base” device and applies an irrelevant “technique” to achieve a combination which fails to accomplish the present invention. As established in the Appeal Brief, there are teaching away and other KSR failings specifically enumerated against individual ones of the **Brown** and **Rahe** references and against their combination. Holding up the

assertions made in the Examiner's Answer to the requirements available in MPEP §2143, the references do not support the rejection.

#### **IV. Response to Additional Positions in Examiner's Answer**

The Examiner's Answer asserts that there is no statement in the claims to support the distinction raised in the Appeal Brief that **Brown** discloses traditional clamp elements (Examiner's Answer p. 7). Traditional clamp elements do not have hemicylindrical sections but clamp by drawing semicylindrical sections into a unidirectional compression of the clamped pipe. Claim 8 calls for hemicylindrical clamp sections, supporting the argument distinguishing traditional pipe clamps.

Rather than retract the "substantially hemicylindrical" assertion characterizing **Brown**, which would be untrue, the Examiner's Answer asserts that the term "hemicylindrical" in claim 8 doesn't really mean "hemicylindrical" (Examiner's Answer p. 7). Not only is "substantially" or other similar modifier not presented, the term "substantially" was removed for an overly aggressive claim 8 in this application by the Amendment of February 2, 2007. The Specification also does not suggest the meaning of the term intended by the Examiner's Answer, i.e., less than a full hemicylinder. MPEP §2111 states: "During patent examination, the pending claims must be 'given their broadest reasonable interpretation consistent with the specification.'" There is no authority to change or ignore terms. The term "hemicylindrical" is consistently applied without an implication of it being a lesser "semicylindrical" instead.

The Specification does waffle on "hemicylindrical" in that there are radiused transitions rather than sharp corners between the hemicylindrical and straight sections. See the Specification p. 4, ¶ [0016]. Again, this is not a lesser semicylindrical.

The Examiner's Answer (p. 9) reiterates the following conclusory statement which misstates the prior art and provides no factual support from the applied references, asserting it as the "reasons":

It would have been obvious to one having an ordinary skill in the art at the time the invention to provide the teaching of the inside diameter of the hemicylindrical sections (clamp members) of the two bars of being smaller than the specified outside diameter (of the pipe and/or tube) by not to exceed five percent with the first straight section juxtaposed with the second straight sections, respectively on the Brown clamp members as taught by Rahe in order to allow the clamp members to be compressed/gripped the pipe with a pressure holding enough without braking the pipe/tube while the bolt is tightened down until the straight bars are juxtaposed and the clamp can be achieved to hold the pipe tightly secured.

The requirements of MPEP §2143 set forth above are missing from this statement and the statement mischaracterizes the prior art as has been explained in detail in the Appeal Brief and above. That the above statement is ineffective as a rejection is supported in MPEP §2141:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Court quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stated that "[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR*, 550 U.S. at \_\_\_\_, 82 USPQ2d at 1396.

The Examiner's Answer then asserts (p. 9) that "Appellant has not provided any persuasive reasons why the examiner's finding is incorrect." The Appeal Brief presents the factual teachings and failings of the references (Appeal Brief pp. 4-8), the failure to meet the *KSR* "rationales" is presented (Appeal Brief pp. 9, 11-12), and there are six *KSR* attributes of unobviousness presented (Appeal Brief pp. 10-11, 12). The characterization that Appellant has not provided "persuasive reasons" in summary without addressing the substance of any of the presented assertions in the Appeal Brief is disingenuous and incorrect.

Finally, the Examiner's Answer (pp. 9-10) generally characterizes the arguments:

It appears that the applicant is attempting to impart the reference of Rahe while the rejection is based on the combination. One cannot show non-obvious by attacking references individually where the rejections are based on the combination of references.

First, the meaning of the first sentence is opaque. Second, the requirements of MPEP §2143, see page 3 above, is in direct contradiction to the second sentence. Third, the statement ignores pages 13-14 of the Appeal Brief. Finally, the statement that follows again violates MPEP §2141 as set forth above on the prior page.

## **V. Conclusion**

The Appeal Brief specifically raises many individual points directed to failings in the references to **Brown** and **Rahe**, taken independently or in combination and has applied the standards under *KSR*, the new PTO guidelines pertaining to obviousness and the criteria for *prima facie* obviousness. In the Examiner's Answer, unsupported conclusory rejections were reiterated without



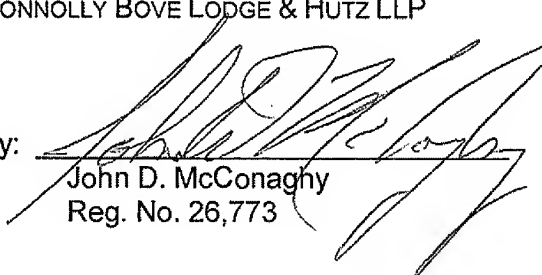
attention to the specific points, supported by the disclosures of **Brown** and **Rahe**, raised in the Appeal Brief. Rather than address specifics, general and incorrect characterizations of the references and of the arguments in the Appeal Brief are asserted. Here a focused application of the requirements of MPEP §2143 has been presented and the mischaracterizations of the Appeal Brief have been addressed.

As is often the case when the prior art does not fit the invention, multiple reasons appear for the inapplicability of that art against the claimed subject matter. Accordingly, it is here asserted that the claims are properly formed and recite patentable subject matter. Consequently, reversal of the rejections against all claims is earnestly solicited.

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